

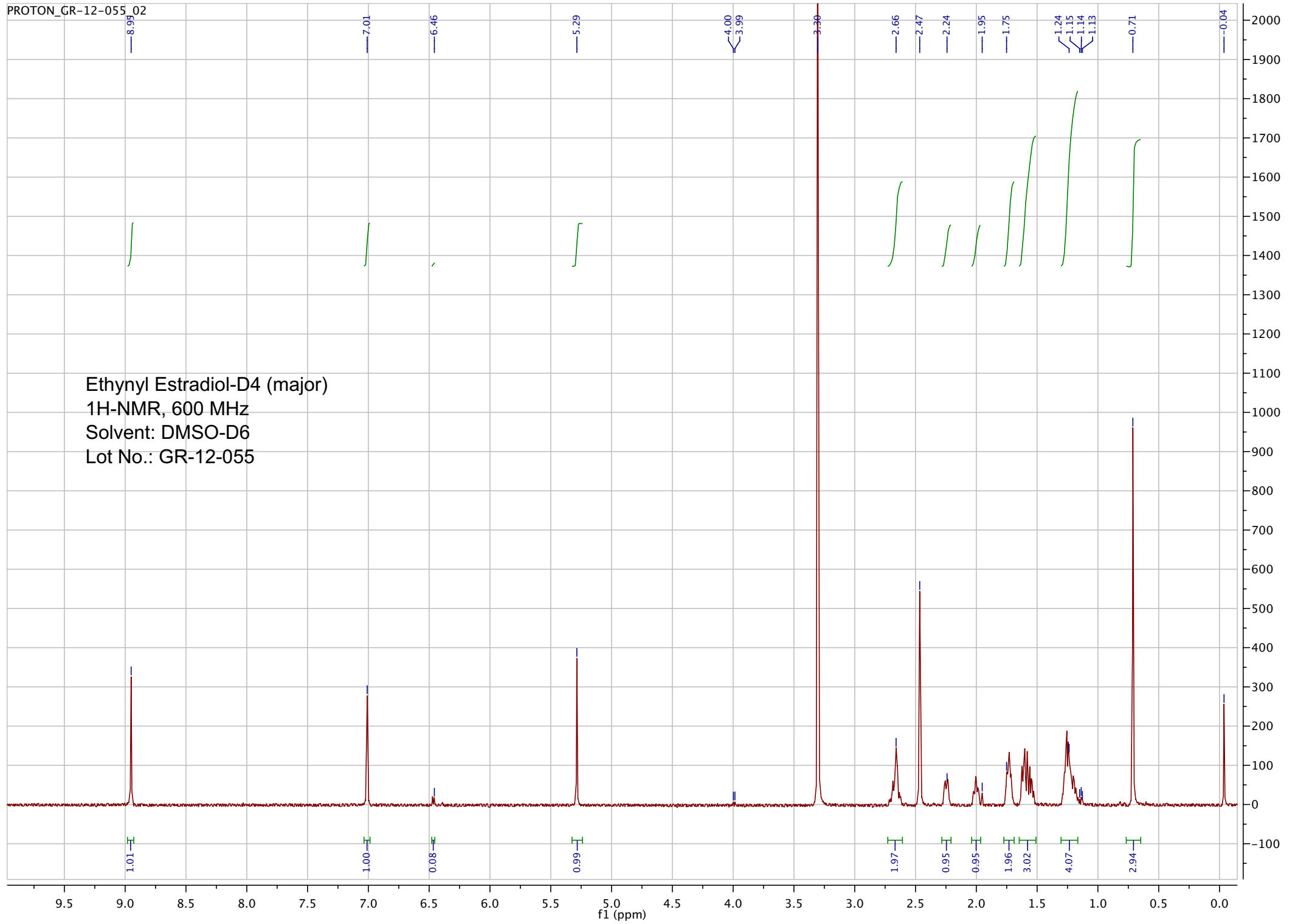
Name:	Ethynyl Estradiol-2,4,16,16-D4 (major)
Lot#:	GR-12-055
Test Date:	07/25/2023 (re-test date: 07/25/2028)
CAS No.:	350820-06-3
MF:	C ₂₀ H ₂₀ D ₄ O ₂
MW:	300.43
Appearance:	White Solid
Purity:	99.0% by HPLC (average of two sample preparations); 98% atom D
¹H-NMR:	Conforms (shows ~8% D3 form and a trace of EtOAc)
MS-ESI (-)	Conforms (shows peak at m/z = 299.07 [M-H] ⁻)
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

Date: 07/25/2023



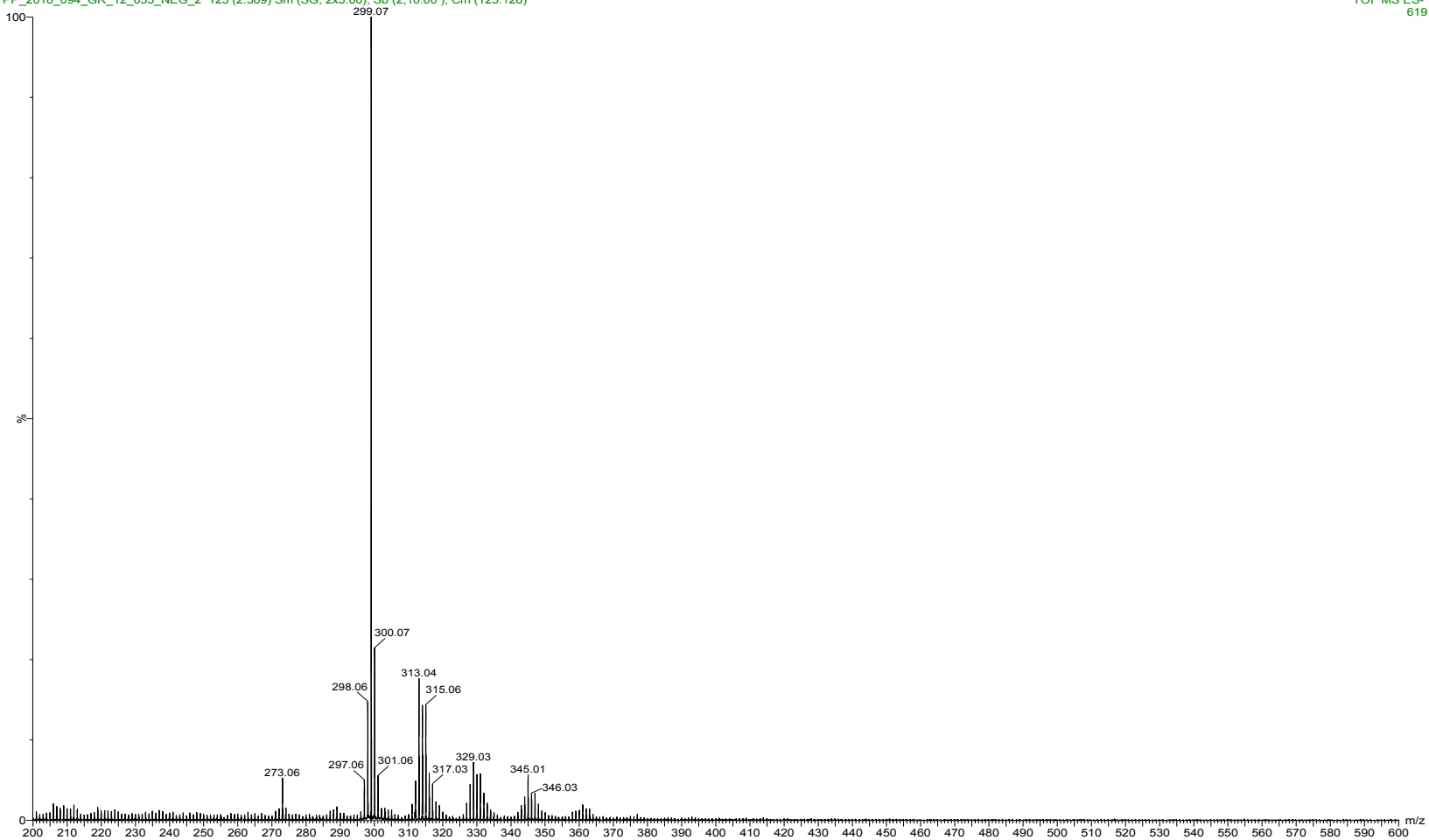
Viorica Rusu, QC/QA Manager



PP_2018_094_GR_12_055_NEG_2 125 (2.309) Sm (SG, 2x5.00); Sb (2,10.00); Cm (125:128)

7.0000000

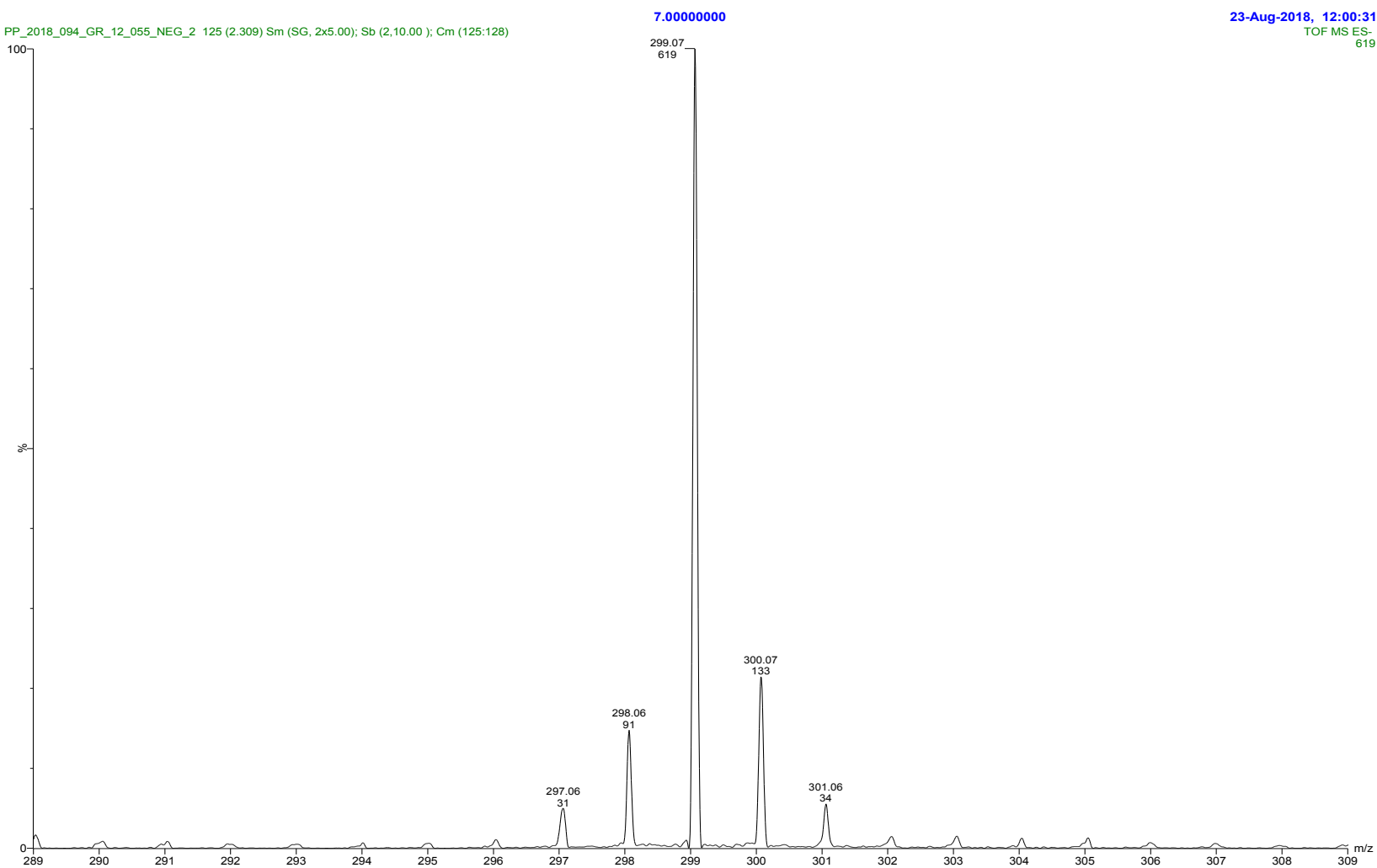
23-Aug-2018, 12:00:31
TOF MS ES-
619



ESI-MS spectrum for sample GR-12-055. Shows monoisotopic [M-H]- mass.

PP_2018_094_GR_12_055_NEG_2 125 (2.309) Sm (SG, 2x5.00); Sb (2,10.00); Cm (125:128)

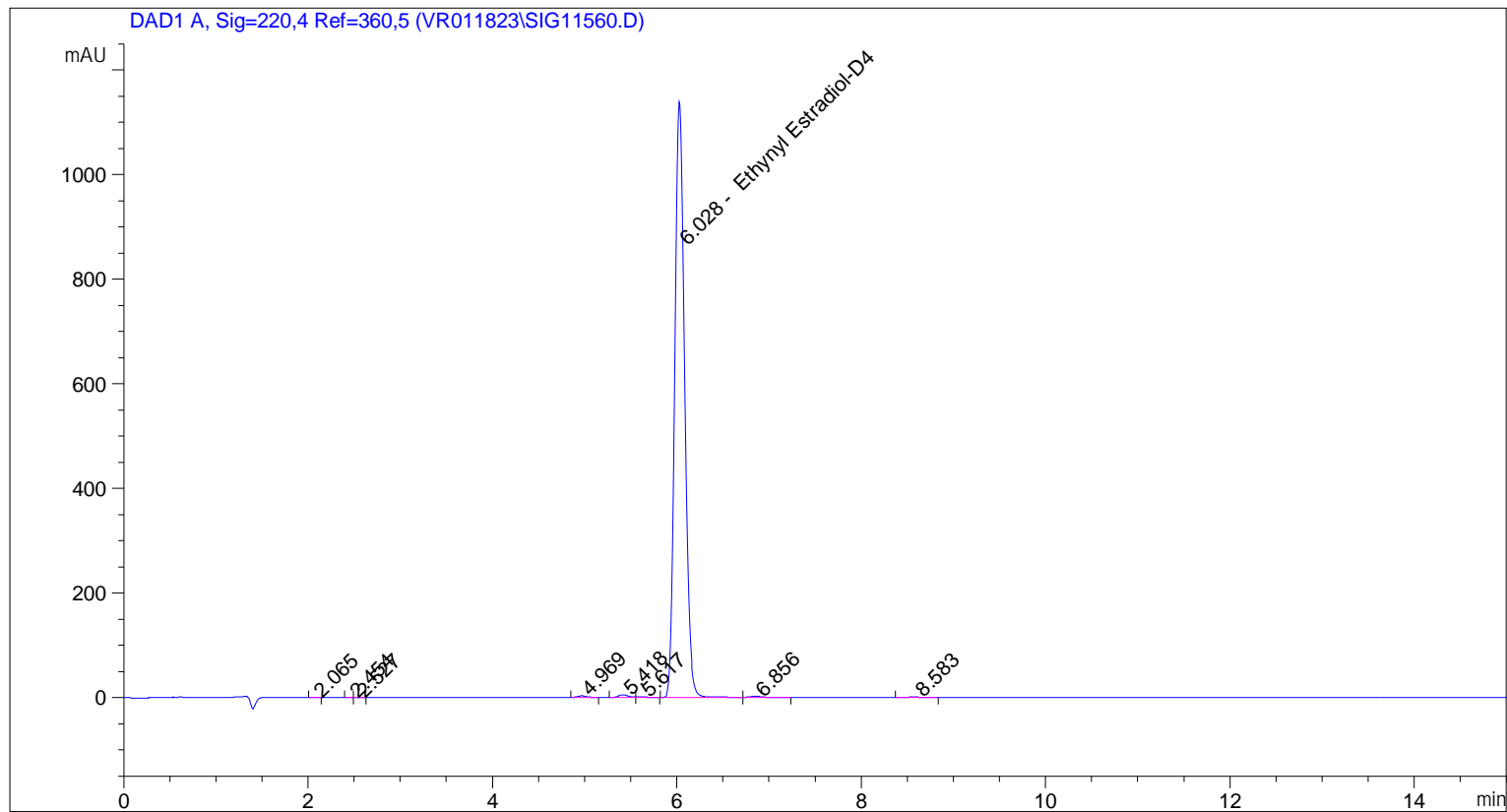
23-Aug-2018, 12:00:31
TOF MS ES-
619



Expansion of above showing intensity values.

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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 83
Injection Date  : 7/25/2023 8:47:44 AM
                                           Inj Volume : 5.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR072523_055.M
Last changed   : 7/25/2023 8:46:44 AM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR072523_055PM.M
Last changed   : 7/25/2023 10:07:14 AM by vrusu
  
```



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 Area Percent Report
 =====

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Sorted By      :      Signal
Calib. Data Modified :      7/25/2023 10:06:08 AM
Multiplier:    :      1.0000
Dilution:     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.065	BB	0.0575	1.23795	0.0148	?
2	2.454	BV	0.0563	1.86404	0.0222	?
3	2.527	VB	0.0625	1.64853	0.0197	?
4	4.969	BB	0.0966	18.49060	0.2205	?
5	5.418	BV	0.1091	33.95841	0.4050	?
6	5.617	VB	0.1035	5.65886	0.0675	?
7	6.028	BV	0.1130	8297.86719	98.9521	Ethyanyl Estradiol-D4
8	6.856	VB	0.1245	17.94699	0.2140	?

Sample Name: GR-12-055 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	8.583	BB	0.1475	7.07226	0.0843	?

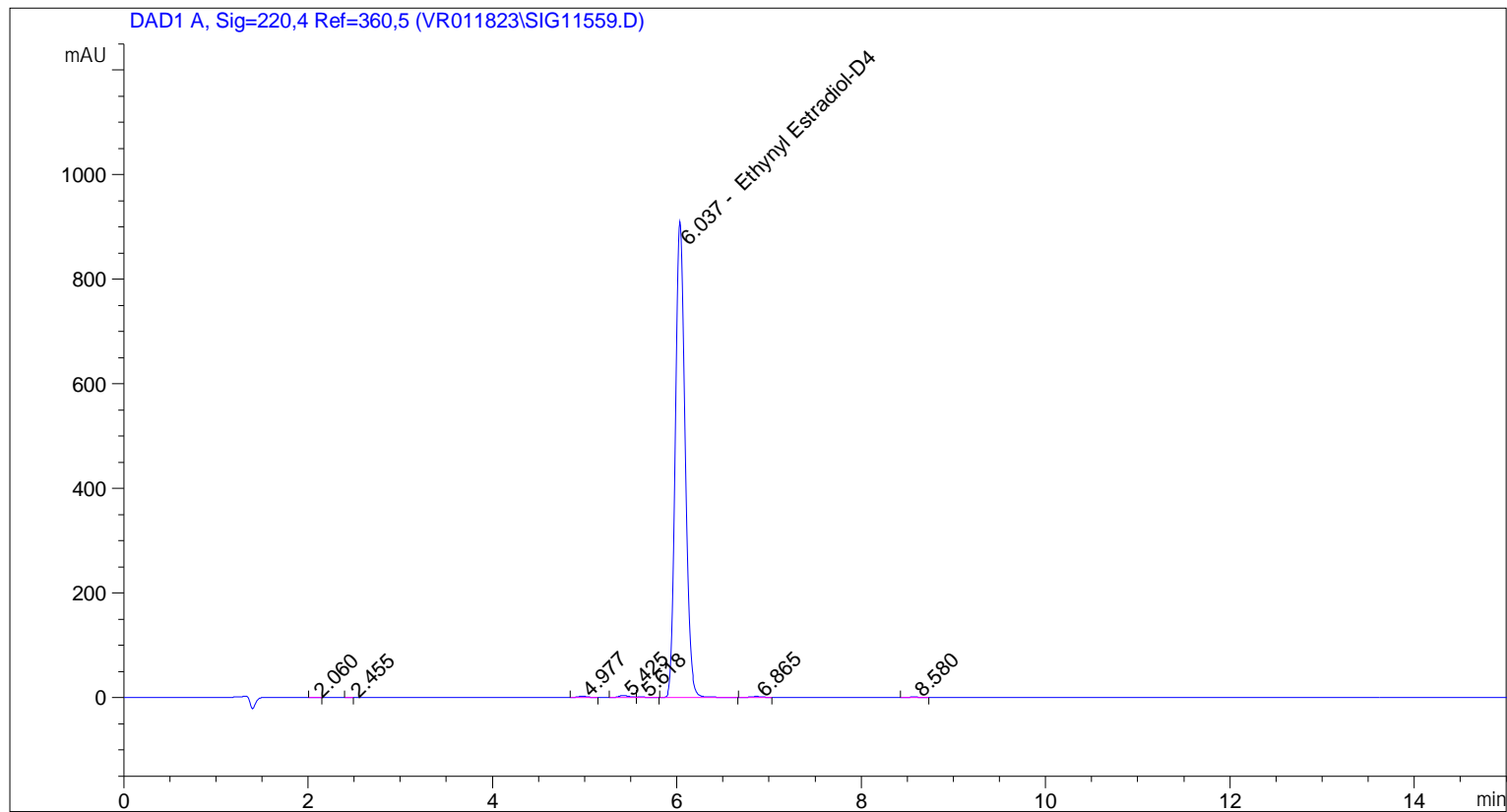
Totals : 8385.74484

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*** End of Report ***

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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 82
Injection Date  : 7/25/2023 8:28:00 AM
                                           Inj Volume : 5.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR072523_055.M
Last changed   : 7/25/2023 8:26:53 AM by vrusu
Analysis Method: C:\CHEM32\1\METHODS\VR072523_055PM.M
Last changed   : 7/25/2023 10:07:14 AM by vrusu
  
```



Area Percent Report

```

Sorted By           : Signal
Calib. Data Modified : 7/25/2023 10:06:08 AM
Multiplier:         : 1.0000
Dilution:           : 1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	2.060	BB	0.0634	1.12544	0.0169	?
2	2.455	BB	0.0442	6.17248e-1	9.280e-3	?
3	4.977	BB	0.1016	15.32955	0.2305	?
4	5.425	BV	0.1127	27.10845	0.4076	?
5	5.618	VB	0.1045	4.81847	0.0724	?
6	6.037	BB	0.1125	6584.89453	99.0022	Ethinyl Estradiol-D4
7	6.865	BB	0.1130	13.03272	0.1959	?
8	8.580	BB	0.1325	4.33159	0.0651	?

Sample Name: GR-12-055

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
Totals :				6651.25800		

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*** End of Report ***